WATERSHED WRAP

Quarterly Newsletter from the Coeur d'Alene Tribe's Fish & Wildlife Program describing watershed management efforts. Offering readers food for conversation and paper for wrapping!

Summer Solstice 2005 (Vol. 9 No. 2)

The Coeur d'Alene Tribe's Fish and Wildlife Programs work in a variety of cooperative, governmental and educational arenas in efforts to protect, enhance and restore our fish and wildlife resources. This publication is intended to provide all people interested in fish, water and wildlife of the Coeur d'Alene Reservation information about our program, and to solicit your support as well as constructive criticism. Thank you for your interest.

Respectfully,

Mark H. Stanger, Fish, Water and Wildlife Education & Outreach Specialist

Wildlife Department Has New Office Manager

By Kate Rau, Office Manager Wildlife Department

Hello! My name is Kate Rau, and I was recently hired as the Office Manager for the Wildlife Department in Natural Resources. I feel blessed to have been hired to work for the Coeur d' Alene Tribe, and I am especially excited about working in the Wildlife Department. My father was a Conservation Officer for the Idaho Department of Fish and Game, and I have a deep respect for wildlife and the environment. I am somewhat new to the area, having moved to Spokane a year and a half ago after living in Oregon for 10 years. My husband Eric and I, along with our 4 yr. old daughter Anna, enjoy camping, hiking, kayaking, x-country skiing and are avid bird-watchers. With so many beautiful lakes and mountains nearby, we have no trouble finding excuses to ignore the weeds in our yard in order to go exploring. I hope my enthusiasm for nature and wildlife brings a positive influence to the department. I look forward to meeting everybody from all the other departments and getting to know all of you.

Lake Creek TMDL Update

By Dee Bailey, Water Quality/TMDL Specialist

The Coeur d'Alene Tribe Water Resource Program is currently working with Environmental Protection Agency, Kootenai-Shoshone Conservation District and Idaho Department of Environmental Quality on the completion of the Lake Creek Total Maximum Daily Load (TMDL). Lake Creek was put on the 1994, 303 (d) list for sediments that year.

The portion of Lake Creek that is listed lies entirely within the Coeur d'Alene Reservation, and has been identified as an impaired waterbody because of excessive sediment in the creek. The Environmental Protection Agency (EPA), with extensive involvement from the Coeur d'Alene Tribe (CDAT) and Idaho Department of Environmental Quality, is proposing to establish a total maximum daily load (TMDL) to identify the necessary reductions of sediment for portions of Lake Creek that are within the Coeur d'Alene Tribal Reservation.

Increased sediment can reduce the quality of pools necessary for fish spawning and winter survival. Sediment can also fill spaces between the gravel, reducing oxygen necessary for the developing fry and trapping the fish. Too much sediment can prevent fish from seeing food in the water and clog their gills. This

TMDL is intended to identify the conditions necessary to restore and maintain Lake Creek's fisheries.

This TMDL identifies the total amount of sediment that can enter Lake Creek and still protect the fisheries. EPA requested comment on a previous draft of the TMDL between March 1 and April 5, 2004. During the public comment period, Idaho Transportation Department (ITD) requested a portion of the total sediment allocation that could enter the creek (and still protect the fisheries) while they construct Highway 95. EPA is proposing an allocation to ITD. This allocation would be less than one percent of the total allocation. Another proposed change is flow based Total Suspended Solids (TSS) limits, which further protect the fisheries.

The Lake Creek TMDL is currently available for public comment from May 20 through June 20th, 2005. Your comments are requested on the addition of an allocation for Idaho Department of Transportation. Persons wishing to comment on the proposed changes to the TMDL must do so in writing by June 20. Written comments must be postmarked by June 20 and sent to Jayne Carlin, Office of Water, US EPA, 1200 Sixth Avenue, Seattle, WA 98101. Comments also may be Faxed to EPA at (206) 553-0165 (call 206-553-8512 to confirm receipt) or e-mailed to carlin.jayne@epa.gov by 5 pm on June 20 (if received, receipt confirmation will be e-mailed to you). All comments should include the name, address, and telephone number of the commenter and a concise statement of the comment and the relevant facts upon which it is based.

Copies of the TMDL documents are available on EPA's website at www.epa.gov/r10earth/cdatribaltmdl.htm or upon request by writing or calling to EPA or the Coeur d'Alene Reservation at the following locations:

Jayne Carlin
EPA Region 10
1200 Sixth Ave.
Seattle, WA 98101
(206) 553-8512
Email: carlin.jayne@epa.gov

Dee Bailey (208)-686-1803
Cd'A Tribal W Resource Prgm
401 Annie Antelope Ave
Plummer, Id 83851
dabailey@cdatribe-nsn.gov

Air Quality Update
By Les Higgins, AQ Manager

Spring is in the air and we need to be aware of what we add to it when doing our "spring cleaning". For years many people have used open burning of yard waste and or a 55-gallon drum to help them get rid of waste that has accumulated during the winter. Burning household waste that can contain dangerous chemicals that affect your health and pollute our environment. The smoke from backyard burning is more than just a nuisance. It also contains many harmful pollutants including particulate matter, sulfur dioxide, lead, mercury, and hexachlorobenzene. These pollutants can cause immediate and long-term damage to the lungs, nervous system, kidneys, or liver. Children, the elderly, and those with preexisting respiratory conditions are often effected the most.
Some of the most toxic chemicals produced by open burning of household waste are dioxins. Dioxins are a group of long lasting organic compounds that form when products containing carbon and small amounts of chlorine are burned. Dioxons are toxic at extremely low levels and are linked to several health problems, including cancer and developmental and reproductive disorders. Backyard burning of household waste is one of the largest known sources of dioxins in the country.
When burning yard waste consider the weather conditions, if other neighbors are burning and where the smoke from your fire is going. Breaking your waste down into smaller piles and burning it at different times could have less of an impact than one large damp pile that will smolder for hours. Use caution and contact our tribal office at 686-8101 with any concerns you might have before you burn.


Youth from the Rocking the Rez fishing at Agency pond!

Opening of Trout Ponds and Newly Constructed Tribal Pond by DeSmet
By Mark H. Stanger, Education & Outreach

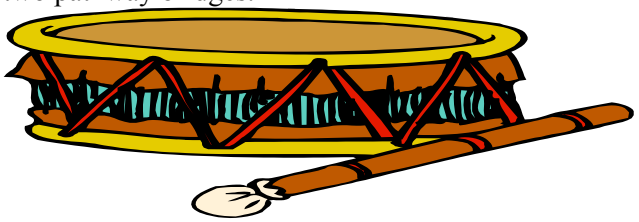
The trout ponds opened for fishing June 1,2005. The Worley and Agency Ponds will be stocked by June 23. Agency pond is located four miles up the Agency Road (south and west of Plummer) just behind the Tribal Court Building.

The Coeur d'Alene Tribal Fisheries Program has completed construction of a new Put and Take fishpond. The new pond constructed on Tribal allotment T322, is approximately two and half miles west of U.S. 95 on the Saltese/Desmet road. The

approximate pond dimensions are 150 feet in width at the dam/dike, 200 feet in length and 16 feet in depth at the deepest point/depth. The pond is constantly fed by a existing natural spring on the west side of the pond at an approximately rate of five plus gallons a minute and a second natural spring that only feeds the pond with water after a rain fall and only for a few days depending on the amount of the rainfall. Bridges were constructed over the two springs that run into the pond that helped connect the trail all the way around. The landscape has several species of native trees, shrubs and grasses, purchased from the Plants of the Wild nursery located in Tekoa, Washington. The pond is approximately one-third filled. We hope that it will be completely filled by the end of the October 2005. A water profile (chemistry) make up is scheduled as soon as the pond fills and has a chance to clear from the sediment created from the new construction. Fish plantings are not expected for the 2005 season.

Breaking ground in April on newly constructed pond by Desmet.

The trail and the parking area are still in need of attention. The trail requires some type of covering (crushed rock, wood chips, other) not yet finalized and the parking area is in need of a rock base, hopefully they will both be completed by the end of the summer 2005. The activities associated with the construction of the pond were completed with in-house staff of the Coeur d'Alene Tribal Fisheries Department. Equipment utilized to complete the construction of the pond included: excavator, dozer, dump truck, whacker, shovel and various hand tools to construct the two pathway bridges.



George Aripa and Jeffery Jordan standing in the foreground of the newly constructed pond.

The annual fish planting for the two existing ponds (Worley & Agency) are scheduled to be planted with Rainbow Trout from the USFWS Dworshak Hatchery stated earlier in this article by June 23 with the expected numbers of fish provided not known at time of writing.

Please make sure you've obtained the appropriate license, heed pond catch limit of five (5) fish per person per day, and follow all other Tribal regulations and posted signage especially regarding release of any live fish or fish eggs without a license from the Fish and Wildlife Program, or use of explosives to catch or destroy fish. Regulation pamphlets are available at area license vendors or the Tribal Fish & Wildlife office.

If you have questions regarding the ponds please contact Mark H. Stanger either by email at mhstanger@cdatribe-nsn.gov , or phone at (208) 686-6071 or Raven George at 686-5302.

Tribal Waterfowl Monitoring Project

By: Nathan Albrecht, Fish and Wildlife Biologist

The southern portion of Lake Coeur d'Alene contains a variety of habitats, making it suitable for nesting, migrating, and wintering waterfowl. The shallow water located in such areas as Benewah Lake and Round Lake serve as excellent foraging areas since they contain abundant macroinvertebrates, insects, and submerged aquatic vegetation. Some of the deeper portions of Chatcolet and Lake Coeur d'Alene contain a variety of fish, which are utilized by some of the diving waterfowl. The small secluded bays and numerous shallow areas with emergent vegetation are excellent places for waterfowl to build their nest and rear their young.

Monitoring waterfowl populations is an important tool in evaluating the quality of the habitat

and the effects of different management practices. The Idaho Department of Fish and Game (IDFG) has monitored waterfowl populations in the area for years, largely focusing on the lateral lakes along the Coeur d'Alene River from Cataldo to Harrison. There has been very little monitoring of waterfowl populations on the southern portion of Lake Coeur d'Alene. In an effort to change this situation, Tribal biologists met with IDFG biologists from the Coeur d'Alene River Wildlife Management Area (CDARWMA) to learn more about their methods and history of waterfowl monitoring in the area. The result of these meetings was the creation of a Tribal waterfowl monitoring project, which uses the same basic methods that IDFG uses to monitor waterfowl on the CDARWMA, but only focuses on the waters of the Reservation. By mirroring the methods that IDFG uses, the data that Tribal biologist gather can be compared with the historical data gathered by IDFG and other management agencies, which will help to identify trends in waterfowl population attributes.

There are a lot of Loons nesting in the Benewah lake area.

The waterfowl monitoring project has three main activities: spring migration counts, breeding pair surveys, and brood counts. All of these activities occur at nine different locations: Plummer Creek Marsh, Lake Chatcolet, Benewah Lake, Hepton Lake, Goosehaven Lake, Round Lake, Windy Bay, Rockford Bay, and the ponds located in the Lake Creek drainage.

Spring migration counts are used to document what types of waterfowl are using the area during their migration, when they arrive and leave, and how many individuals are present. Biologists achieve this by driving or walking established routes and using spotting scopes to count and identify the different waterfowl species present at each site. This generally occurs during March and April of each year.

Breeding pair and brood counts are used to get an idea of breeding effort and reproduction. Breeding pair counts usually occur two times during May. This is the time when most waterfowl species are pairing up to build their nests and lay their eggs. These surveys are similar to the migration counts only this time male/female pairs are being counted. Brood counts will take place at three different times throughout June and July. This survey will focus on counting the number of young in each brood.

One of the main reasons for conducting these surveys is to identify areas of quality habitat, and to adjust management strategies accordingly. One early result of this has already taken place. The common loon is a waterfowl species that may be seen on Lake Coeur d'Alene during the spring and fall. It commonly nests in Montana, but virtually no nesting loons have occurred in this area for at least 10 years. During the fall of 2004, Tribal biologists assisted a loon biologist from the Biodiversity Research Institute in Maine to assess the potential loon habitat on the southern portion of Lake Coeur d'Alene. His report concluded that Lake Coeur d'Alene contains the best potential loon-nesting habitat in northern Idaho. He went on to recommend deploying some artificial nesting structures to increase the chances of loons nesting in this area.

These artificial nesting structures are essentially floating platforms, which are anchored to the bottom of the lake. A canopy is attached to the platform to deter avian predators. With the generous donations from McFarland Cascade Lumber Company and the WREN Foundation, Tribal biologist recently constructed three of these loon rafts. They have been placed in three separate locations: Plummer Creek Marsh, the mouth of Lake Creek in Windy Bay, and the northern shore of Benewah Lake. These rafts will be regularly monitored by Tribal personnel to document their use. Similar rafts have also been deployed by volunteers of the WREN Foundation in other portions of northern Idaho including Lake Pend Orielle, Priest Lake, and Upper Priest Lake. These rafts should not be approached by humans, as loons are very sensitive to nest disturbance. If loons begin nesting in this area, it would be a significant event, and one that would demonstrate the benefits of several agencies and organizations cooperating for wildlife conservation.

The development of the Tribal waterfowl monitoring project has the potential to give researchers a better picture of what type of waterfowl habitat is located on Coeur d'Alene Reservation. In addition, this information, coupled with similar data from other agencies will give a clearer picture of quality of habitat and waterfowl production throughout the region. For questions or comments regarding this project, please call Nathan at 686-7042.

Water Awareness Week: Reaching out to 6th graders using macroinvertebrates

By Bruce Kinkead, Fisheries Biologist

As I reflect back upon our activities of Water Awareness Week, as well as my involvement every spring with Kellogg Middle School, I realize I get as much out of the activity as the kids do. Every spring during our Water Awareness Week I run the macroinvertebrate (Bug) station, and then the following week I visit Kellogg Middle School to teach lab classes where we look at live and preserved specimens. Getting posters, field and lab equipment ready, and in the case of Kellogg, a long drive, makes for an exhausting day. During these opportunities to work with the kids, you can't help but appreciate the teachers that work with these kids everyday. But you also realize why they do it! Showing kids something that they never realized was there and taking a closer look into a primeval world of insects, arachnids (spider family), annelids (worms and leeches), crustaceans (crayfish), and mollusks (snails and clams) opens up a young mind to new possibilities. It turns out it is as much fun to the teacher as it is to the students.

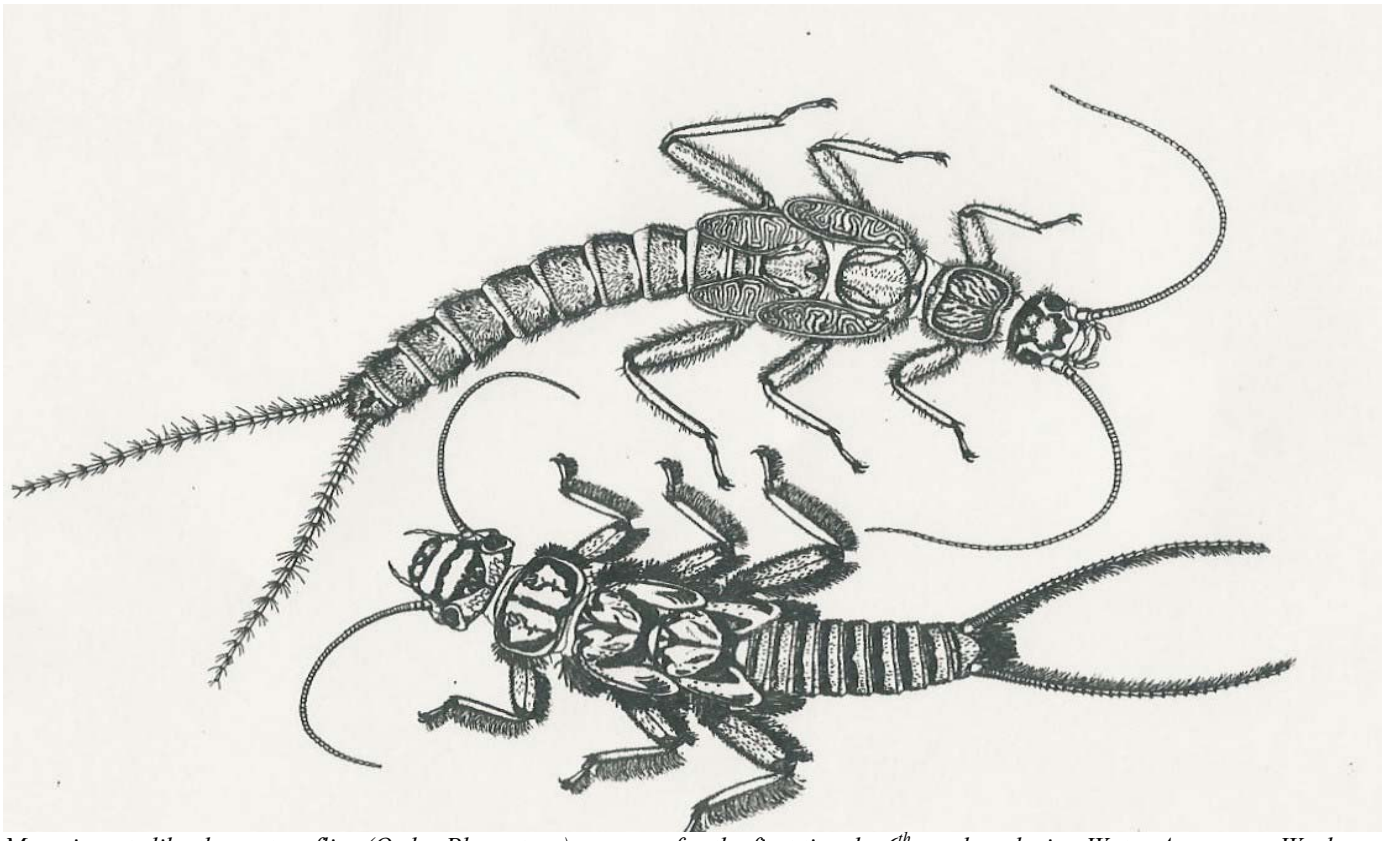
Bruce Kinkead goes over the common macro invertebrates found in Lake Creek prior to turning these students loose to sort through their sample.

During the Coeur d'Alene Tribe's Water Awareness Week at Lake Creek we drop samples into a large white pan and have the kids find their own specimens with tweezers. Responses from the kids range from "cool" to "ehh"! I explain that all the insects found in the pan will not bite and encourage them to hold the larger specimens and use a magnifying glass for a closer inspection. While a few of the girls are absolutely horrified that all this "stuff" is in the creek, it is more often than not the girls that are the first to volunteer to hold the largest and perhaps most frightening of all the insects found, the large stonefly nymphs. With sizes up to two inches and resembling an earwig according to many of the kids, it is not surprising that many wish to stick to picking them up with tweezers. The caddis flies (periwinkles) are another favorite with their protective cases made of sand, sticks, pine needles, and leaves. As they are picked up they retreat back into their cases until they feel it is safe to come out again. The most common critter found was the mayfly ranging from ¼ inch down to barely visible. While the eyes, tails and fluttering gills are visible with the naked eye, the use of a dissecting microscope is needed to truly appreciate the bizarre looking body parts of the mayfly and other small specimens.

Bruce with Jason Hansen and Chris Huff of Kellogg Middle School

I have visited Kellogg Middle School for their version of Water Awareness Week for the past three years. They are fortunate to have access to dissecting scopes where the prehistoric nature of aquatic insects comes into view. Body features such as gills and armor spikes can be clearly seen, as well as the mouthparts of a stonefly that resemble the creature in the movie *Predator* starring Arnold Swarzeneggar. Many of the creatures not seen with the naked eye, such as the water mite, come to life under the microscope.

With each class winding down, I stressed these invertebrates are used by biologist in characterizing the water quality of a stream. Seeing the large clawed insects such as the mayflies and stoneflies indicates cold and clean water flowing through gravels free of excess fine sediments. A stream with worms, snails, and fly larvae exclusively indicates only tolerant species may survive in an environment that has been disturbed. As the whistle blows at Lake Creek, or the school bell at Kellogg Middle School, the kids are not ready to move on. As I get a warm "Thank You" from the kids, I begin preparation for the next batch of future biologists.



Many insects like these stoneflies (Order Plecoptera) are seen for the first time by 6th graders during Water Awareness Week.